[0018] Besides, the configuration is characterized in that when a light emitting device having an organic light emitting diode is formed, the support is an encapsulation material and the device is a self-luminous device.

[0019] In addition, the configuration is characterized in that when a liquid crystal display device is formed, the support is an opposite substrate and the device has a pixel electrode, in which a liquid crystal material is filled between the pixel electrode and the opposite substrate.

[0020] Furthermore, the configuration is characterized in that at least one of the support and the transfer object is transparent.

[0021] Moreover, the configuration is characterized in that the curvature radii of the support and the transfer object range from 50 to 200 cm.

[0022] Besides, in the configuration, the peeling method is not defined particularly. Such methods can be used that a separate layer is disposed between the peeled layer and the substrate and the separate layer is removed with a chemical solution (etchant) to separate the peeled layer from the substrate, and that a separate layer made of amorphous silicon (alternatively, polysilicon) is disposed between the peeled layer and the substrate and laser light is irradiated as passed through the substrate to release hydrogen contained in the amorphous silicon, whereby a clearance is generated to separate the peeled layer from the substrate. In addition, when the laser light is used for separation, devices contained in the peeled layer are desirably formed to set annealing temperatures at 410° C. or below so as not to release hydrogen before peeling.

[0023] Furthermore, as another peeling method, a peeling method may be used in which a membrane stress between two layers is utilized for peeling. This peeling method can cleanly, easily separate in an oxide layer or in the interface by a physical unit with no film removal (peeling) even through such processes, in which a metal layer, preferably a metal nitride layer is deposited on a substrate, an oxide layer is further deposited on the metal nitride layer, devices are formed over the oxide layer, and then the deposition process or annealing at temperatures of 500° C. or above is performed. For further facilitating the peeling, annealing or laser light irradiation may be performed before peeling by the physical unit.

[0024] Moreover, according to each of the fabrication methods, the display with a curved surface can be realized to allow installation in vehicles such as automobiles, aircrafts, ships and trains. The inner walls and ceilings of the vehicles have wide space as much as possible and are configured of smooth, curved surfaces not causing problems even though human bodies come up against them for any reason. It is also possible to install a display device having a TFT and an organic light emitting diode in these curved surfaces as a meter or lighting system. In addition to this, the method for driving the display device having the TFT and the organic light emitting diode is preferably the active matrix type, but it is acceptable to be the passive matrix type.

[0025] For example, the window of the vehicles is formed of a base material and the display device having the organic light emitting diode with the curvature matched with the curved surface of the window is bonded with no curve as it is, whereby images and meters can be displayed. Particularly, the display device having the organic light emitting diode can be formed to be significantly light weight, and thus space is not changed. When the display device having the organic light emitting diode is bonded to the window of the vehicles, the substrates, electrodes and wiring lines are desirably transparent, and a film for blocking the external light may be provided. Furthermore, it is preferable to confirm outside landscapes without problems when not displayed.

[0026] Moreover, along the inner walls, doors and seats of the vehicles, or along car dashboards, the display device having the organic light emitting diode with the curvature matched with the curved surfaces is bonded with no curve as it is, whereby images and meters can be displayed. It is fine only to bond the display device fabricated according to the invention along the curved surface, and thus the installation work is significantly simple, not requiring partial work to the inner walls, doors, seats and dashboards in particular. Besides, in the automobiles, for example, when the car is right-handled, a dead angle exists left backside because a part of a car body (a portion between window glasses) is there. However, when the display device fabricated according to the invention is installed in the portion between the window glasses, and a camera capable of shooting in the dead angle direction is mounted outside the car to connect them each other, a driver can confirm the dead angle. Particularly, the display device having the organic light emitting diode is the display device that is superior in moving pictures to the liquid crystal display device and has a wider viewing angle.

[0027] In addition, the ceiling of the vehicles is formed of a base material, and the display device having the organic light emitting diodes with the curvature matched with the curved surface of the ceiling is bonded with no curve as it is, whereby image display and lighting the inside can be performed. Furthermore, in the automobiles, for example, when the display devices fabricated according to the invention are bonded in the ceiling and portions between the window glasses, and cameras capable of shooting outside landscapes corresponding to the separate display devices are mounted outside the car to connect them each other, people inside the car can enjoy outside landscapes as if they seated in a convertible car. Moreover, when the display device fabricated according to the invention is bonded to the ceiling and sidewalls in trains and electric railcars, for example, advertisement display and television pictures can be displayed without narrowing the space. Particularly, the display device having the organic light emitting diode is the display device with a viewing angle wider than that of the liquid crystal display device.

[0028] In the vehicles, when the curvature radius of the curved surface in the installed display device ranges from 50 to 200 cm, the TFT and the organic light emitting diode can be driven without problems.

[0029] In addition, the semiconductor device in the invention is the devices in general which can function by utilizing the semiconductor characteristics. The electro-optic devices, the light emitting devices, the semiconductor circuits and electronic devices are all semiconductor devices.